U.S. Patent Application No. 10/087,987 Attorney Ref. No.: 082137-0280712

## Amendment of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

## 1-33. (Canceled)

- 34. (Currently amended) A method of treating a pre-malignant lesion or a malignant cancer in a subject, wherein the pre-malignant lesion or malignant cancer is characterized by the presence of activated matriptase, the method comprising:
  - (a) obtaining a biological sample from a subject;
- (b) exposing the biological sample to an detectable agent that recognizes and binds to activated matriptase;
- (c) detecting activated matriptase that is bound to the detectable agent in the biological sample; and
- (d) administering to the subject an agent antibody that blocks the activity of active matriptase.
- 35. (Currently amended) The method of claim 34, wherein the matriptase that characterizes the pre-malignant lesion of malignant cancer is produced by cells of an epithelial tissue.
- 36. (Currently amended) The method of claim 34, wherein the pre-malignant lesion or malignant cancer is present in a breast of the subject.
  - 37. (Canceled)
- 38. (Currently amended) The method of claim 34, wherein the detectable agent is an a detectable antibody.
- 39. (Currently amended) The method of claim 38, wherein the <u>detectable</u> antibody binds specifically to activated matriptase but not to inactive matriptase.
- 40. (Currently amended) The method of claim 39, wherein the <u>detectable</u> antibody binds specifically to an activated two-chain form of matriptase, but not to inactive, single-chain matriptase.
- 41. (Currently amended) The method of claim 40, wherein the <u>detectable</u> antibody is selected from M69 and M123.

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- 42. (Currently amended) The method of claim 38, wherein the <u>detectable</u> antibody is labeled with a detectable label.
- 43. (Currently amended) The method of claim 42, wherein the <u>detectable</u> antibody is labeled with a radioisotope or a fluorescent label.
- 44. (Currently amended) The method of claim 43, wherein the <u>detectable</u> antibody is labeled with a radioisotope selected from the group consisting of <sup>62</sup>Cu, <sup>99</sup>Te, <sup>131</sup>I, <sup>123</sup>I, <sup>111</sup>In, <sup>90</sup>Y, <sup>188</sup>Re, and <sup>186</sup>Re.

## 45-47. (Canceled)

- 48. (Currently amended) The method of claim 34, wherein the biological sample is obtained by biopsy, nipple aspirate, or removal of body fluid that has come into contact with cells of a-pre malignant lesion or a malignant cancer of the subject.
- 49. (Currently amended) The method of claim 34, wherein the agent antibody that blocks the activity of active matriptase binds specifically to and directly blocks the activity of activated matriptase.
  - 50. (Canceled)

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## II, ELECTION WITHOUT TRAVERSE

In response to the restriction requirement dated September 15, 2005, the applicants elect, without traverse, the invention of Group 1, claims 34-36, 38-44, and 48-50, directed to a method of identifying cancer *in vitro* that comprises active matriptase, and upon detection thereof, treating the cancer with an antibody.